

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/071033 A3

(51) International Patent Classification⁷: **C09J 1/02**
(21) International Application Number:
PCT/RU2005/000022
(22) International Filing Date: 21 January 2005 (21.01.2005)
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data:
2004101725 23 January 2004 (23.01.2004) RU

(71) Applicant (for all designated States except US):
R-AMTECH INTERNATIONAL, INC. [US/US];
2101-112th Avenue NE, Suite 210, Bellevue, Washington,
98004 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **YUSHKO, Ivan
Yakovlevich** [RU/RU]; ul. Molodogvardejskaya, 4-12,
Moscow, 121467 (RU).

(74) Agent: **BATOVSKAYA, Tamara Ignatievna**; a/ya 79,
Moscow, 123007 (RU).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
20 October 2005

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF PRODUCTION OF POLYSILICATE BINDER FOR ADHESIVES AND COATINGS, POLYSILICATE
BINDER, ADHESIVE COMPOSITION FOR ADHESIVES AND COATING ON ITS BASIS

(57) Abstract: The invention relates to the chemical industry, namely production of polysilicate binder and adhesive compositions for adhesives and protective and decorative coatings on its basis, and can be used in industry and household (for adhering ceramic or natural stone tiles or other facing materials to concrete and plastered surfaces of walls, ceilings, floors) for inner and outer finishing of residential and public buildings, and also for corrosion protection of different surfaces. Polysilicate binder is produced by preparing a product of interaction between sodium and/or potassium silicate aqueous solution with specific module and density and lithium hydroxide, and subsequent addition into it amorphous silicon dioxide with specific surface from 175 to 380 m²/g. Adhesive composition for adhesives and coatings comprises from 25 to 49 percent by weight of above mentioned polysilicate binder and from 51 to 75 percent by weight of inorganic filler. Adhesive composition for adhesives and coatings has higher bond strength, including under prolonged water exposure, higher working life and stability under storage, ecology safety, higher thermal resistance and refractoriness.



WO 2005/071033 A3